

# An Overview of the Data Availability and File Formats for the National Blend of Models, Version 5.0

## Introduction

National Blend of Models v5.0 data are available for public download in GRIB2 and text bulletin format. The two main hosting platforms for these data are:

- Historical archive on Amazon Web Services (AWS) Public Dataset S3 Bucket (Historical Archive)
- Operational data with 1-2 day retention on NOAA Operational Model Archive and Distribution System (NOMADS)

Table 1: URL Locations for NBM File Types	
NOMADS	<a href="https://nomads.ncep.noaa.gov/pub/data/nccf/com/blend/prod/blend.YYYYMMDD/CC/(core/qmd/text)">https://nomads.ncep.noaa.gov/pub/data/nccf/com/blend/prod/blend.YYYYMMDD/CC/(core/qmd/text)</a>
AWS	<a href="https://noaa-nbm-grib2-pds.s3.amazonaws.com/index.html#blend.YYYYMMDD/CC/(core/qmd/text)">https://noaa-nbm-grib2-pds.s3.amazonaws.com/index.html#blend.YYYYMMDD/CC/(core/qmd/text)</a>

## GRIB2 Data

The GRIB2 files contain all available elements in GRIB2 format (more information about the data format specifications can be found on the [NBM GRIB2 Specifications Page](#)). Files are in directories specified by Table 1, where YYYYMMDD is the run date-stamp, and CC is the cycle. File names are as follows:

- blend.tCCz.core.fXXX.RR.grib2 (for most NBM elements)
- blend.tCCz.qmd.fXXX.RR.grib2 (for QMD elements)

where CC is the cycle, XXX is the forecast hour, and RR is the region. (Example: blend.t00z.master.f001.co.grib2) There are also limited numbers of other elements available by single file.

## Text Bulletin Data

The NBM text bulletins take data from the gridded NBM forecasts and generate tabular text data for weather stations from the closest usable grid point. Bulletins are available for over

9,000 land and marine stations in the CONUS, Alaska, Hawaii, Puerto Rico, Guam, and Oceanic domains. The available stations and identifiers can be found on the [NBM Stations Page](#). Note that not all elements may be available for all stations. All regions (including both land and marine stations) are included in the same product.

Table 2: NBM Text Bulletin Products			
Label	Product Name	Time Step	Forecast Hours
NBH	Hourly	Hourly	1-25 hrs
NBS	Short	3-Hourly	6-72 hrs*
NBE	Extended	12-Hourly	24-192 hrs*
NBX	Super-Extended	12-Hourly	204-264 hrs*
NBP	Probabilistic (Extended)	12-hourly	24-264 hrs*

*\* Forecast Hours are listed in reference to 00z and 12z cycles only. Actual times will vary by cycle.*

## Data Access

Files on AWS And NOMADS can be downloaded directly via url or via utilities such as wget and curl. NOMADS provides options for grib filter, in order to download data for specific variables, levels, geographic regions, etc. Please refer to the [NOMADS Webpage](#) for instructions and best practices (the NOMADS servers are managed outside the NBM Team). The AWS servers host an archive of past NBM data since 2021. As this covers multiple versions of the model, prior data may not match this description of Version 5.0. Please make sure to reference the changes to the product on the [NBM Versions Webpage](#).